

Application Number 09/742,625
Responsive to Office Action mailed October 11, 2006

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REMARKS

Prior to the filing of this response, claims 37-39, 41-46, 48, 50-52 and 54 were pending in the application.

In this response, claim 50 is amended to more properly depend from claim 37. Since this amendment places the claims in better form for appeal and would not require additional consideration or search, entry into the record is respectfully requested.

Claims 44-46, 48 and 54 are cancelled without prejudice or disclaimer, and Applicants reserve the right to file at a later date a divisional application directed to the subject matter of these claims.

In view of the above amendments and the following remarks, Applicants respectfully request further examination of the application and reconsideration of the rejections set forth in the Final Office Action dated October 11, 2006.

I. Election/Restrictions

On page 2 of the Office Action, claims 44-46 and 48 are withdrawn from consideration as directed to a non-elected invention.

In response, claims 44-46, 48 and 54 (which depends from claim 44), are cancelled without prejudice or disclaimer, and Applicants reserve the right to file at a later date a divisional application directed to the subject matter of these claims.

II. Claim Objections

On page 3 of the Office Action, paragraph 1, as understood, claim 50¹ is objected to under 37 C.F.R. § 1.75(c) as being in improper dependent form for failing to further limit the subject matter of a previous claim. The Examiner contends that claim 37 recites all essential steps of the claimed method, and argues that the further step recited in claim 50 cannot be added as a further essential step.

Applicants respectfully disagree. The rule recited in this rejection applies to claims with "consisting of" transitional phrases (see, e.g. MPEP 2111.03), but the Examiner has cited no

¹ The Office Action objected to claim 44, but since claim 44 is an independent claim that is currently withdrawn from consideration, Applicants believe that the Examiner intended to object to claim 50.

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authority that such a rule applies to claims with "consisting essentially of" transitional language. Since independent "consisting essentially of" claims are not strictly closed, and are open to additional steps that do not alter the basic and novel characteristics of the claimed method, Applicants respectfully submit that additional optional steps may be recited in claims depending therefrom.

In this response, the comprising language is removed from claim 50 to make clear that claim 50 represents an optional additional step of the method claimed in claim 37.

Reconsideration and withdrawal of the objection are respectfully requested.

III. Claim Rejections Under 35 U.S.C. § 112

On pages 3-4 of the Office Action, paragraphs 2-4, claims 44-46, 48 and 54 are rejected under the second paragraph of 35 U.S.C. § 112 as indefinite for failing to particularly point out and distinctly claim the inventive subject matter. The Examiner contends that claim 44 recites a further step in addition to the "essential" steps of claim 37.

Since independent claim 44 is directed to a different embodiment of the inventive process than claim 37, it would be expected to have different method steps. For at least this reason claim 44 is not indefinite.

However, in this response, claims 44-46, 48 and 54 have been withdrawn from consideration as directed to a non-elected invention, and accordingly are cancelled, so this rejection will not be further addressed at this time.

IV. Claim Rejections Under 35 U.S.C. § 103

A. DE '732 and Carmichael

On pages 4-7 of the Office Action, paragraph 9, claims 37-39, 41-43 and 51-52 are rejected under 35 U.S.C. § 103(a) as obvious over DE 2224732 (DE '732) in view of Carmichael (U.S. Patent No. 2,375,195; hereinafter referred to as Carmichael). It is contended that it would have been obvious to one of ordinary skill in the art to use the quick setting adhesive of Carmichael in the process of DE '732 to provide the presently claimed process, since Carmichael

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teaches that a quick setting adhesive is suitable for forming priming coats for wood and porous surfaces. This rejection is respectfully traversed for the reasons that follow.

The present independent claim 37 requires that a chemically crosslinkable primer coating composition be applied on a surface of the compressible mat. This primer coating composition forms a chemically crosslinked polymer matrix when, or as, it is applied to the compressible mat. A top coat composition is then applied on the crosslinked polymer matrix, and the mat is compressed and heated.

As the Examiner admits, DE '732 fails to teach that the primer forms a chemically crosslinked matrix on the compressible mat without a heat drying step. The present obviousness rejection is based on the contention that it would have been obvious to a skilled artisan to replace the primer in DE '732 with the fast setting adhesive in the Carmichael reference.

The DE '732 reference teaches that a fast curing aminoplast resin is applied on a paper substrate, dried, and a mixture of aminoplast/acrylic resin is applied on the resulting impregnated substrate. The coated impregnated substrate is then applied on a wood product, and the wood product is heated and compressed. In the present case, there is no cited teaching in DE '732 that would have suggested replacement of his aminoplast resin primers with the thermosetting adhesive in Carmichael with the goal of eliminating the primer drying step. The fact that Carmichael's adhesive is fast setting does not provide this motivation, as the DE '732 abstract specifies that his aminoplast resins are fast curing. In the present case, there is no teaching in DE '732 that would have suggested to a skilled artisan to eliminate the primer drying step, and no teaching that elimination of this step would have a reasonable expectation of success in forming an impregnated substrate that could be further coated and subsequently applied to a wood product.

Carmichael teaches that his adhesive is "extremely quick setting when heated, is quick setting at a low range of temperature, and is quick setting at a low temperature effective to avoid injury to the wood from the pressing treatment."² Since Carmichael's adhesive is intended for use in adhering layers in plywood sheets, one of ordinary skill would have no reason to employ this adhesive without a heating step. While the adhesive composition in Carmichael may be further modified by addition of rosin oils, driers and water to form a primer-like coating for wood

² Carmichael, page 2, lines 53-57.

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substrates,³ there is no teaching in the Carmichael reference that this primer forms a crosslinked matrix on such substrates.

To establish a *prima facie* case of obviousness, there must be some reason, suggestion or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the proposed combination. That knowledge cannot come from the applicant's invention itself.⁴ In the present case the Examiner has cited no teachings in DE '732 or Carmichael that would suggest elimination of the primer drying step. For at least this reason the present obviousness rejection under 35 U.S.C. § 103(a) is based on hindsight following review of Applicants' disclosure, and is improper. Reconsideration and withdrawal of the cited rejection are respectfully requested.

B. DE '732, Carmichael and Helmer

On pages 7-8 of the Office Action, paragraph 10, claims 37-39, 41-43 and 51-52 are rejected under 35 U.S.C. § 103(a) as obvious over DE '732 in view of Carmichael, and further in view of Helmer et al. (WO 96/22338; hereinafter referred to as Helmer). It is contended that it would have been obvious to one of ordinary skill in the art to replace the primers in Carmichael with the compounds in Helmer since the compounds in Helmer harden quickly. This rejection is respectfully traversed for the reasons that follow.

Further to the discussion in Section IVA above, there is no cited teaching in DE '732 that would have suggested replacement of his aminoplast resin primers with a thermosetting adhesive with the goal of eliminating the primer drying step. The fact that Carmichael and Helmer's adhesives harden quickly does not provide this motivation, as the DE '732 abstract specifies that his aminoplast resins are fast curing. There is no teaching in DE '732 that would have suggested to a skilled artisan to eliminate the primer drying step, and no teaching that elimination of this step would have a reasonable expectation of success in forming an impregnated substrate that could be further coated and subsequently applied to a wood product.

In the present case the Examiner has cited no teachings in DE '732, Carmichael or Helmer that would suggest elimination of the primer drying step. For at least this reason the

³ Carmichael, page 2, Example II.

⁴ See, e.g. *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir. 1992).

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present obviousness rejection under 35 U.S.C. § 103(a) is based on hindsight following review of Applicants' disclosure, and is improper. Reconsideration and withdrawal of the cited rejection are respectfully requested.

C. DE '732, Carmichael, Helmer and van der Hoeven

On pages 8-9 of the Office Action, claims 38-39 and 50 are rejected under 35 U.S.C. § 103(a) as obvious over DE '732 in view of Carmichael, further in view of Helmer, and further in view of van der Hoeven (U.S. Patent No. 4,789,604; hereinafter referred to as van der Hoeven).

Further to the discussion in Section IVA-IVB above, there is no cited teaching in DE '732 that would have suggested replacement of his aminoplast resin primers with a thermosetting adhesive with the goal of eliminating the primer drying step. The fact that Carmichael and Helmer's adhesives harden quickly does not provide this motivation, as the DE '732 abstract specifies that his aminoplast resins are fast curing. There is no teaching in DE '732 that would have suggested to a skilled artisan to eliminate the primer drying step, and no teaching that elimination of this step would have a reasonable expectation of success in forming an impregnated substrate that could be further coated and subsequently applied to a wood product (alone or with a paper overlay).

In the present case the Examiner has cited no teachings in DE '732, Carmichael, Helmer or van der Hoeven that would suggest elimination of the primer drying step. For at least this reason the present obviousness rejection under 35 U.S.C. § 103(a) is based on hindsight following review of Applicants' disclosure, and is improper. Reconsideration and withdrawal of the cited rejection are respectfully requested.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims.

Please charge any additional fees or credit any overpayment to deposit account number 50-1778.

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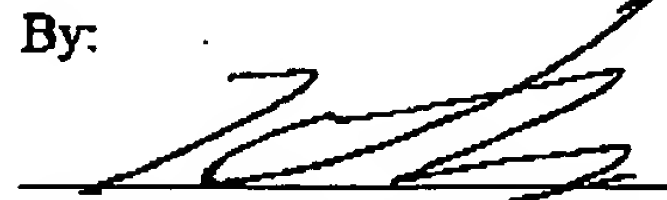
If questions remain regarding the above, or the Examiner wishes to discuss any aspect of this application, please contact the undersigned.

Date:

By:

December 11, 2006

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